

Date: Fri, 8 Jul 94 04:30:16 PDT
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>
Errors-To: Ham-Ant-Errors@UCSD.Edu
Reply-To: Ham-Ant@UCSD.Edu
Precedence: Bulk
Subject: Ham-Ant Digest V94 #214
To: Ham-Ant

Ham-Ant Digest Fri, 8 Jul 94 Volume 94 : Issue 214

Today's Topics:

Antenna on my boat?? (2 msgs)
Free Antenna Software
Loop Antenna using SGC 230
MFJ-1798 (2 msgs)
need 80 meter dipole help (6 msgs)
phased vertical array software?
Propagation Analysis Sourcecode
Where is KLM - Need parts for KT-34XA
Where is the best pla
Yagi design software??

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>

Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>

Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 4 Jul 1994 20:29:06 -0700
From: ihnp4.ucsd.edu!usc!nic-nac.CSU.net!ctp.org!not-for-mail@network.ucsd.edu
Subject: Antenna on my boat??
To: ham-ant@ucsd.edu

Hello all,

I posted about this is rec.radio.cb and got no replys so now I'm
trying here...I need to put a cb in my 18 foot boat for the summer and I need
help with the antenna. The boat is all fiberglass except for a little
wood and some chrome railing around the outside. My problem is how do I
get a ground plane without any metal on the boat. Do I use the lake? My
idea would be to put a copper plate about 5 in by 5 in on the bottom of

the boat and run a hefty ground wire to the antenna ground. Would this work...Would the lake be a sufficient ground...HELP...I dunno what to do !!

Thanx a bunch,
Nathan Hickson
nhickson@walrus.mvhs.edu

--

"There are no mistakes, only opportunities to learn"
"I haven't lost my mind, I know EXACTLY where I left it!"

Date: Fri, 8 Jul 1994 08:05:37 GMT
From: news.Hawaii.Edu!kahuna!jeffrey@ames.arpa
Subject: Antenna on my boat??
To: ham-ant@ucsd.edu

In article <2vak22\$psk@eis.calstate.edu> nhickso@eis.calstate.edu (Nathan M. Hickson) writes:

>Hello all,

>

> I posted about this in rec.radio.cb and got no replies so now I'm
>trying here...I need to put a cb in my 18 foot boat for the summer and I need
>help with the antenna. The boat is all fiberglass except for a little
>wood and some chrome railing around the outside. My problem is how do I
>get a ground plane without any metal on the boat. Do I use the lake? My
>idea would be to put a copper plate about 5 in by 5 in on the bottom of
>the boat and run a hefty ground wire to the antenna ground. Would this
>work...Would the lake be a sufficient ground...HELP...I dunno what to do
>!!

Nathan - yes that will work fine. I sailed a boat from Hawaii to San Francisco with using the ballast keel as the 'ground'. It effectively used the ocean as a ground plane. I used 20M daily and was given great signal reports.

You'll want to epoxy the copper plate to your boat's bottom close to the transom so you can run the wire up the stern - you don't want to drill any holes below the waterline for the wire (although some do). No need for a sacrificial zinc fitting if your boat stays in fresh water.

A quarter wave whip is your best antenna on 11M.

Jeff NH6IL

Date: 6 Jul 1994 16:46:52 -0700
From: ihnp4.ucsd.edu!agate!news.ossi.com!news.fai.com!amdahl!netcomsv!dodge!not-for-mail@network.ucsd.edu
Subject: Free Antenna Software
To: ham-ant@ucsd.edu

The April issue of QST on page 46 under "New Products" lists some free antenna software. The programs are called "DXPLOT", "PATPLOT", and "ANTPLOT". The bbs to download them from is: 216-349-8698.

Would someone in or near the 216 area code please upload these programs to an ftp site on the net?

tnx & 73,
km6wt.

Date: 7 Jul 1994 13:38:59 MST
From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!asuvax!pitstop.mcd.mot.com!mcdphx!schbbs!waccvm.corp.mot.com!RGAB10@network.ucsd.edu
Subject: Loop Antenna using SGC 230
To: ham-ant@ucsd.edu

I am considering the purchase of the SGC 230 antenna coupler using it with a small loop for a transmission/receiving antenna. Since the loop is directional, I would mount it on a rotator to take advantage of the inherent gain. Does anyone have experience with this type of configuration? How well does it work over the 160 to 10 meter bands? I've heard good things about the coupler, but not in this particular application. Thanks for any comments

Steve K3NPK

Date: 7 Jul 1994 15:12:00 GMT
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!EU.net!chsun!elna.ethz.ch!naricom!tobias@network.ucsd.edu
Subject: MFJ-1798
To: ham-ant@ucsd.edu

Hi,

I read in a announcement about a new vertical antenna MFJ-1798. It's a 10 band antenna 80/40/30/20/17/15/12/10/6/2m.

Unfortunately, datasheets and antenna are not yet available from the dealer.
Has one of you experience with this antenna?
I'm interested about bandwidth, performance in QSO and mechanical stability.

Thank es 73 de Tobias

Date: 7 Jul 1994 20:38:12 GMT
From: ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!
howland.reston.ans.net!math.ohio-state.edu!news.acns.nwu.edu!ftpbox!mothost!
delphinium.cig.mot.com!rtsg.mot.com!reichrt@network.ucsd.
Subject: MFJ-1798
To: ham-ant@ucsd.edu

In article <2vh600\$qbs@elna.ethz.ch>, tobias@nari.ikt.ethz.ch (Tobias Meier,ETF
E121,22803,,,y) writes:

|>
|> Hi,
|>
|> I read in a announcement about a new vertical antenna MFJ-1798.
|> It's a 10 band antenna 80/40/30/20/17/15/12/10/6/2m.
|> Unfortunately, datasheets and antenna are not yet available from the dealer.
|> Has one of you experience with this antenna?
|> I'm interested about bandwidth, performance in QSO and mechanical stability.
|>
|> Thank es 73 de Tobias
|>
|>
|>

Ditto! Looking for actual performance ratings before I buy!

I did get the Installation Manual from MFJ on the 1798. Wow! Think I'll
go back to something easy like reducing the National Debt...HI!

The picture wasn't very clear plus tune up is quite involved. It has a 8.5'
square Capacitive top hat. There were no VSWR vs Freq vs Dimensions chart
supplied. It does give starting dimensions for tuning.
Tune up by band in specified order is required...so a 80 - 2 Meter rig will be
needed.

It mentioned non-corrosive material but didn't notice if any nuts/bolts/clamps
were stainless steel.

--

=====
| KD9JQ ex KA7IXS,WA8NBD 708-632-6669 Work | \|\|

	Charles H. Reichert	708-358-3827 HOME		^ ^
	955 Concord Ln.			(0 0)
	Hoffman Ests., IL. 60195	reichrt@rtsg.mot.com		____.oo0__U__0oo.____
=====				Hmmm...Could Be!

Date: 7 Jul 1994 16:59:41 GMT
 From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!convex!news.onramp.net!
 news.sprintlink.net!malenchi@network.ucsd.edu
 Subject: need 80 meter dipole help
 To: ham-ant@ucsd.edu

I am looking for information on how to construct a small
 80 meter dipole. Due to the size of my lot I can not support
 anything longer then 60 to 70 feet. I know the radiation
 pattern and output will not be the same as a full size
 dipole but that what I get when I didn't think about
 it when I bought my house 10 years ago.....
 Any info would be appreciated..

John Malenchik N9IGP
 EMAIL - malenchi@tiny.sprintlink.net

/

Date: Thu, 07 Jul 94 10:52:07 PDT
 From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!gatech!newsxfer.itd.umich.edu!
 zip.eecs.umich.edu!yeshua.marcam.com!news.kei.com!ssd.intel.com!chnews!
 news@network.ucsd.edu
 Subject: need 80 meter dipole help
 To: ham-ant@ucsd.edu

In article <2vhc9t\$mnrn@news.sprintlink.net>, <malenchi@sprintlink.net> writes:

>
 > I am looking for information on how to construct a small
 > 80 meter dipole. Due to the size of my lot I can not support
 > anything longer then 60 to 70 feet. I know the radiation
 > pattern and output will not be the same as a full size
 > dipole but that what I get when I didn't think about
 > it when I bought my house 10 years ago.....
 > Any info would be appreciated..
 >
 > John Malenchik N9IGP
 > EMAIL - malenchi@tiny.sprintlink.net
 > /

Avoid bending the dipole legs if possible, use traps,
or put up a vertical.

Tom WB7ASR...

Date: Thu, 7 Jul 1994 19:18:18 GMT
From: ihnp4.ucsd.edu!sdd.hp.com!col.hp.com!srigenprp!alanb@network.ucsd.edu
Subject: need 80 meter dipole help
To: ham-ant@ucsd.edu

Tom WB7ASR (tom_boza@ccm.hf.intel.com) wrote:

: In article <2vhc9t\$mrn@news.sprintlink.net>, <malenchi@sprintlink.net> writes:
: >
: > I am looking for information on how to construct a small
: > 80 meter dipole. Due to the size of my lot I can not support
: > anything longer then 60 to 70 feet. ...

: Avoid bending the dipole legs if possible, use traps,
: or put up a vertical.

I disagree. It's perfectly OK to bend the ends of the dipole to get it
to fit into the available space. Since the current is greatest near the
center of a dipole, you can bend the ends at a 90 degree angle without
upsetting the radiation pattern much. A typical arrangement is to have
a flat-top portion running horizontal out as far as you can get it, and
then have the remaining length hanging straight down at the ends.

That will tend to change the resonant length somewhat, so cut the dipole
a bit long and be prepared to trim for lowest SWR.

AL N1AL

Date: 7 Jul 1994 11:44:01 -0700
From: ihnp4.ucsd.edu!swrinde!gatech!asuvax!chnews!ornews.intel.com!
ornews.intel.com!not-for-mail@network.ucsd.edu
Subject: need 80 meter dipole help
To: ham-ant@ucsd.edu

In article <2vhfho\$851l@chnews.intel.com> Tom WB7ASR <tom_boza@ccm.hf.intel.com>
writes:

>In article <2vhc9t\$mrn@news.sprintlink.net>, <malenchi@sprintlink.net> writes:

>> I am looking for information on how to construct a small
>> 80 meter dipole. Due to the size of my lot I can not support
>> anything longer then 60 to 70 feet. I know the radiation
>> pattern and output will not be the same as a full size
>> dipole but that what I get when I didn't think about
>> it when I bought my house 10 years ago.....
>> Any info would be appreciated..

>Avoid bending the dipole legs if possible, use traps,
>or put up a vertical.

>Tom WB7ASR...

NO No no. Bend the ends straight down after making the flat top as long
and high as possible. Most of the radiation comes off the middle area
near the feedpoint. Use the 102 foot length and ladder line if you have
a tuner. This will allow all band operation. Otherwise use 120-130'
depending on phone or cw band desired.
Actually, the vertical is better for DX on 80 meters if you can put down
enough radials.

Jim WA7LDV...

--

zardo@ornews.intel.com WA7LDV

Date: Thu, 7 Jul 1994 23:57:43 GMT
From: ihnp4.ucsd.edu!sdd.hp.com!hpscit.sc.hp.com!icon!greg@network.ucsd.edu
Subject: need 80 meter dipole help
To: ham-ant@ucsd.edu

Alan Bloom (alanb@hpnmarb.sr.hp.com) wrote:
: upsetting the radiation pattern much. A typical arrangement is to have
: a flat-top portion running horizontal out as far as you can get it, and
: then have the remaining length hanging straight down at the ends.

Down or sideways? I just recently read an article that suggested it was best
to keep the bent parts "in the same plane", or words to that effect, which I
interpret as horizontal.

Just curious,

Greg.

Date: 7 Jul 1994 20:57:31 GMT
From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!asuvax!chnews!scorpion.ch.intel.com!
cmoore@network.ucsd.edu
Subject: need 80 meter dipole help
To: ham-ant@ucsd.edu

In article <2vhc9t\$mrn@news.sprintlink.net>,
<malenchi@tiny.sprintlink.net> wrote:
>I am looking for information on how to construct a small
>80 meter dipole. Due to the size of my lot I can not support
>anything longer then 60 to 70 feet. John Malenchik N9IGP

Hi John, if at all possible, make your dipole 88 ft. long which is
3/8 wavelength on 75m. Performance tends to drop off below that
length. However, a 70 ft. dipole fed with 450 ohm ladder-line from
a good antenna tuner will radiate fairly efficiently assuming that
your antenna tuner has the impedance matching range to load it.

ELNEC says that an 88 ft long, 30 ft high dipole has a feedpoint
impedance of 13-j460 on 4 MHz (this is my present antenna). A 70
ft long, 30 ft high dipole has a feedpoint impedance of 7.4-j790
I don't worry about the 80/1 SWR with the 88 ft dipole but a 70
ft dipole would have a considerably higher SWR than the 88 ft one.

Not worrying about an 80/1 SWR blows some minds, but on 4 MHz my
total losses are around 1 dB even with the 80/1 SWR because I have
an efficient antenna tuner and I DON'T USE COAX!!! Ladder-line is
virtually lossless on 4 MHz even with an 80/1 SWR.

Good luck and 73, KG7BK, 00TC, CecilMoore@delphi.com

Date: 7 Jul 1994 07:46:02 -0400
From: newstf01.cr1.aol.com!search01.news.aol.com!not-for-mail@uunet.uu.net
Subject: phased vertical array software?
To: ham-ant@ucsd.edu

In article <Cot67L.JFq@world.std.com>, hrick@world.std.com (Rick Harrison)
writes:

I haven't seen any share ware programs, but I recently purchased the ARRL
Antenna book and it has indepth explanations of how they operate, with
formulas and several design examples. You could probably take the

formulas they give you and write your own program fairly easily. I have been contemplating it.

Date: 7 Jul 1994 10:27:44 -0400
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!gatech!udel!news2.sprintlink.net!
news.sprintlink.net!rtp.vnet.net!char.vnet.net!not-for-mail@network.ucsd.edu
Subject: Propagation Analysis Sourcecode
To: ham-ant@ucsd.edu

Anyone know where I may find MUF calculation source code?
Preferably in C?

--

```
~~~~~  
      Bill Jackson           |      Internet: bjackson@vnet.net  
      919-850-3044           |      ax.25: nt4t@n1gmw.nc.usa.na  
~~~~~
```

Date: Mon, 4 Jul 1994 20:46:33 GMT
From: microsoft!hexnut!frede@uunet.uu.net
Subject: Where is KLM - Need parts for KT-34XA
To: ham-ant@ucsd.edu

In article <2usdtl\$849@hpscit.sc.hp.com> rkarlqu@scd.hp.com wrote:
> In article <dgfCs637A.894@netcom.com>, David Feldman <dgf@netcom.com> wrote:
> >Need spare parts for KT-34XA - can't find KLM - help!!!!!!

KLM is now located in Monroe, Washington. Call directory assistance for area code 206 and ask for "KLM Antennas" in Monroe.

Hope this helps,

FredE

Date: Thu, 7 Jul 94 05:55:00 -0500
From: ihnp4.ucsd.edu!agate!iat.holonet.net!wwwswinc!art.harris@network.ucsd.edu
Subject: Where is the best pla
To: ham-ant@ucsd.edu

In <2uurpg\$b06@chnews.intel.com>, Tom <tom_BOZA@CCM.HF.INTEL.COM> asked:

>Can someone tell me where the best place is to install my
>Drake 1KW low pass filter?

- > 1) Between my HF transceiver and my 1KW RF amp
- > 2) Between my 1 KW RF amp and my 1KW antenna tuner
- > 3) Between my 1KW antenna tuner and my antenna
- > 4) Sell it at the next ham fest
- > 5) Anywhere after the transceiver

The correct answer is 2.

The filter needs to operate in a line with a low SWR, therefore it must be installed on the rig side of the tuner.

If it were placed between the xcvr and the amp, any harmonics generated in the amp would go unfiltered.

Answer number 4 is my second choice 8-;

Art, N2AH

Date: Thu, 7 Jul 1994 20:14:27 GMT
From: ihnp4.ucsd.edu!swrinde!howland.reston.ans.net!europa.eng.gtefsd.com!
news.uoregon.edu!netnews.nwnet.net!ns1.nodak.edu!plains!jilek@network.ucsd.edu
Subject: Yagi design software??
To: ham-ant@ucsd.edu

If anyone knows of a good package that will do all of the work for you please let me know.

Thanks
Ryan KA0UPH

Date: 7 Jul 1994 15:47:30 -0700
From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!asuvax!chnews!ornews.intel.com!
ornews.intel.com!not-for-mail@network.ucsd.edu
To: ham-ant@ucsd.edu

References <2vhfho\$85l@chnews.intel.com>, <2vhie2\$8cg@ornews.intel.com>,
<2vhqot\$khb@chnews.intel.com>ws.in
Subject : Re: need 80 meter dipole help

In article <2vhqot\$khb@chnews.intel.com> CecilMoore@Delphi.com writes:

--

zardoz@ornews.intel.com WA7LDV

Date: 7 Jul 1994 21:06:37 GMT

From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!asuvax!chnews!scorpion.ch.intel.com!

cmoore@network.ucsd.edu

To: ham-ant@ucsd.edu

References <2vhc9t\$mnr@news.sprintlink.net>, <2vhfho\$851@chnews.intel.com>,
<2vhie2\$8cg@ornews.intel.com>oo

Subject : Re: need 80 meter dipole help

In article <2vhie2\$8cg@ornews.intel.com>,
Jim Garver <zardoz@ornews.intel.com> wrote:

>

>Use the 102 foot length and ladder line if you have
>a tuner. This will allow all band operation. >Jim WA7LDV...

Hi Jim, this is starting to look like an Intel thread. My 88 ft dipole works almost as well as my old 102 ft dipole on 4 MHz. The reason I shortened it was to get two radiation nodes on 20m and a cloverleaf pattern on 17m which gives me world-wide coverage (except straight over the North Pole) on those two bands. With a 102 ft dipole you get a clover-leaf pattern on both 20m and 17m and therefore very little broadside radiation.

73, KG7BK, 00TC, CecilMoore@Delphi.com

End of Ham-Ant Digest V94 #214
